WHAT IS CLAIMED IS:

- 1. A beverage dispenser, comprising:
 - a water supply;
 - a CO₂ source;
 - a carbonator coupled to said water supply and said CO₂ source, said carbonator including at least one hydrophobic hollow fiber proximate to which water is carbonated; and
 - a beverage syrup source, such that beverage syrup and carbonated water are dispensed to form finished drinks.
- 2. The dispenser of Claim 1, wherein CO₂ is supplied through said hollow fiber.
- 3. The dispenser of Claim 2, wherein water flows across the outside of said hollow fiber.
- 4. The dispenser of Claim 1, wherein water is supplied through said hollow fiber.
- 5. The dispenser of Claim 1, and further comprising a water treatment system, such that said water supply comprises treated water.
- 6. The dispenser of Claim 5, wherein said water treatment system comprises a reverse osmosis water treatment system.
- 7. The dispenser of Claim 6, and further comprising a reservoir coupled to said reverse osmosis water treatment system, said reservoir also being coupled to said carbonator.
- 8. The dispenser of Claim 1, wherein said hydrophobic hollow fiber comprises polypropylene.
- 9. The dispenser of Claim 1, and further comprising a plain water circuit, such that both carbonated and non-carbonated beverages may be produced.

- 10. The dispenser of Claim 1, and further comprising a pre-carbonator coupled to said carbonator, said pre-carbonator carbonating water before further carbonation in said carbonator.
- 11. The dispenser of Claim 10, wherein said pre-carbonator comprises at least one hollow fiber.
- 12. The dispenser of Claim 10, and further comprising a reservoir coupled to said precarbonator, said reservoir holding carbonated water.
- 13. The dispenser of Claim 1, and further comprising a reservoir coupled to said carbonator, said reservoir holding carbonated water.
- 14. The dispenser of Claim 13, and further comprising a plain water circuit, such that both carbonated and non-carbonated beverages may be produced.
- 15. A method of dispensing beverages, comprising:

supplying water;

supplying CO₂;

carbonating the water with the CO₂ proximate to at least one hydrophobic hollow fiber; and

dispensing carbonated water and beverage syrup to form finished drinks.

- 16. The method of Claim 15, and further comprising treating the water.
- 17. The method of Claim 15, and further comprising treating the water through reverse osmosis.
- 18. The method of Claim 16, and further comprising storing the treated water before carbonating.

- 19. The method of Claim 15, and further comprising dispensing non-carbonated water, such that both carbonated and non-carbonated beverages may be produced.
- 20. The method of Claim 15, and further comprising pre-carbonating the water before carbonating the water.